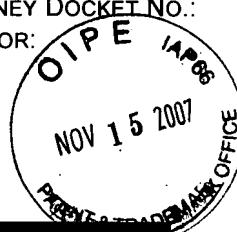




ATTORNEY DOCKET NO.:
INVENTOR:
TITLE:



MS1-1882US
SUN ET AL.
GENERIC IMAGE HALLUCINATION
REPLACEMENT SHEET

SHEET 1 OF 7



ORIGINAL IMAGE
102

FIG. 1



ORIGINAL IMAGE

102

BICUBIC

FIG. 3

PRIOR ART



BACKPROJECTION

NEAREST NEIGHBOR

FIG. 2

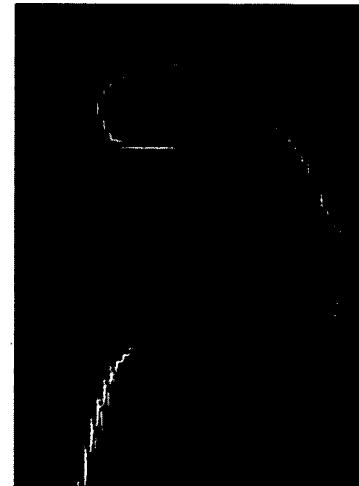
PRIOR ART

FIG. 4



GENERIC IMAGE
HALLUCINATION

FIG. 5



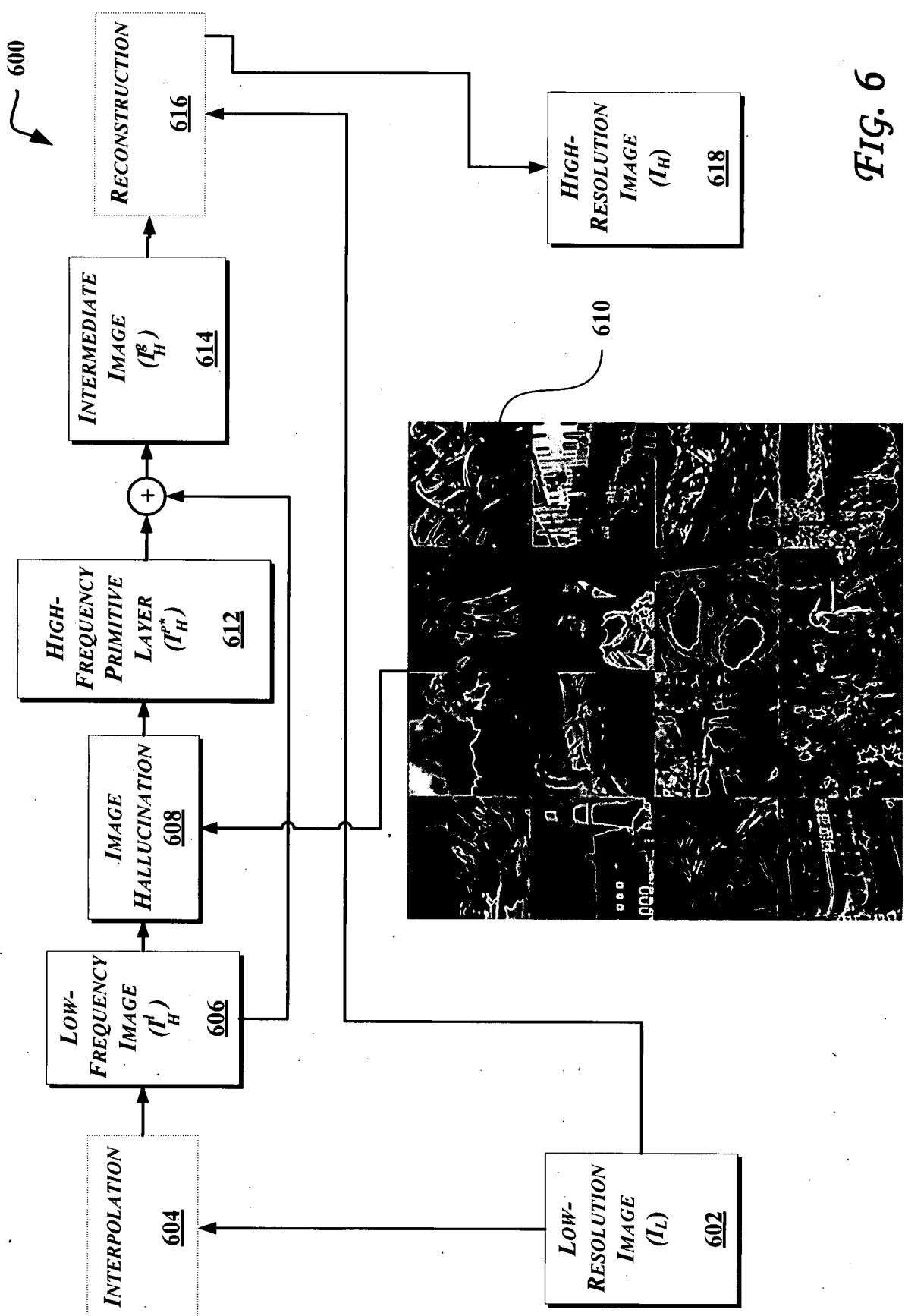


FIG. 6

TRAINING IMAGES



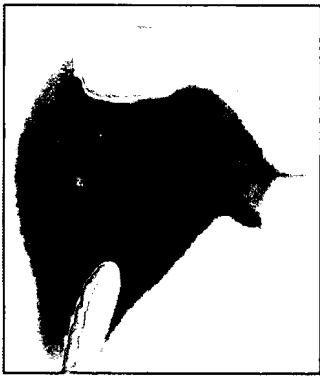
I_L
FIG. 7



I'_L
FIG. 8

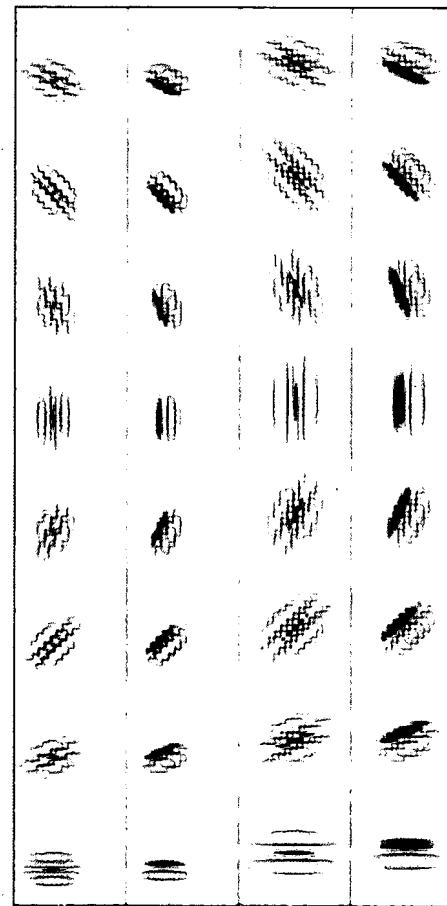


I_H^*
FIG. 9



I'_H
FIG. 10

I_H
FIG. 11

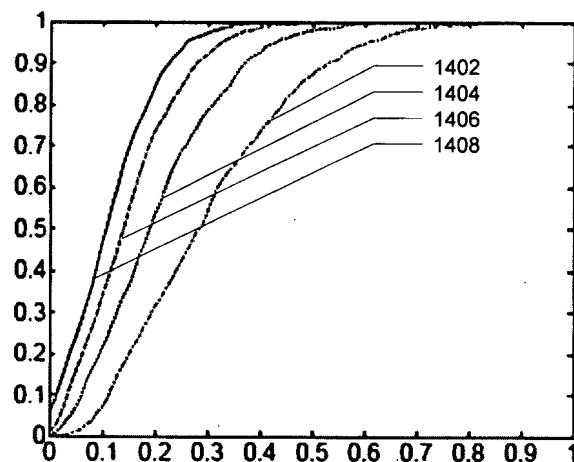


FILTER BANK

TYPICAL PRIMITIVES

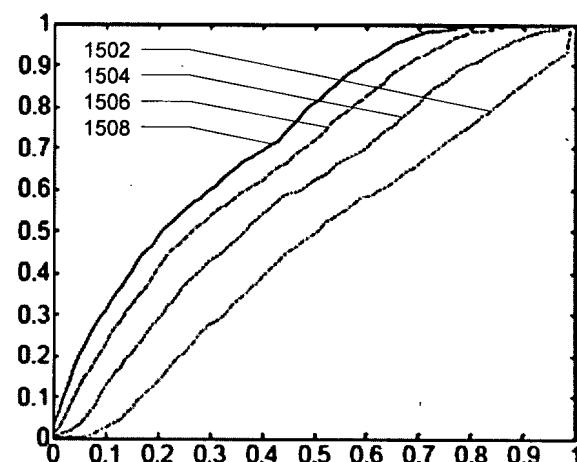
FIG. 12

FIG. 13



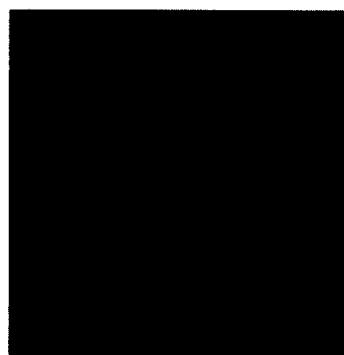
PRIMITIVE TRAINING DATA

FIG. 14



COMPONENT TRAINING DATA

FIG. 15



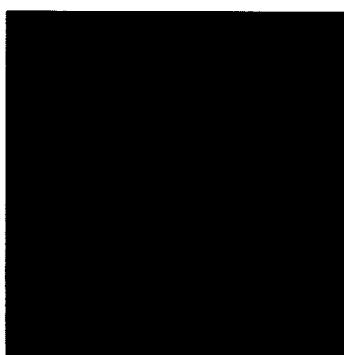
LOW-FREQUENCY IMAGE

FIG. 17



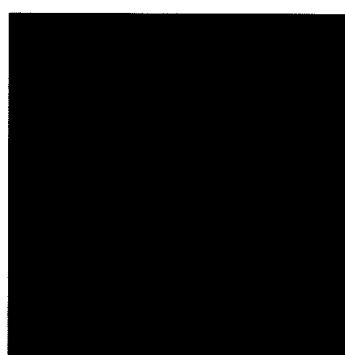
EXTRACTED CONTOUR PATCHES

FIG. 18



NEAREST NEIGHBOR

FIG. 19



MARKOV CHAIN

FIG. 20

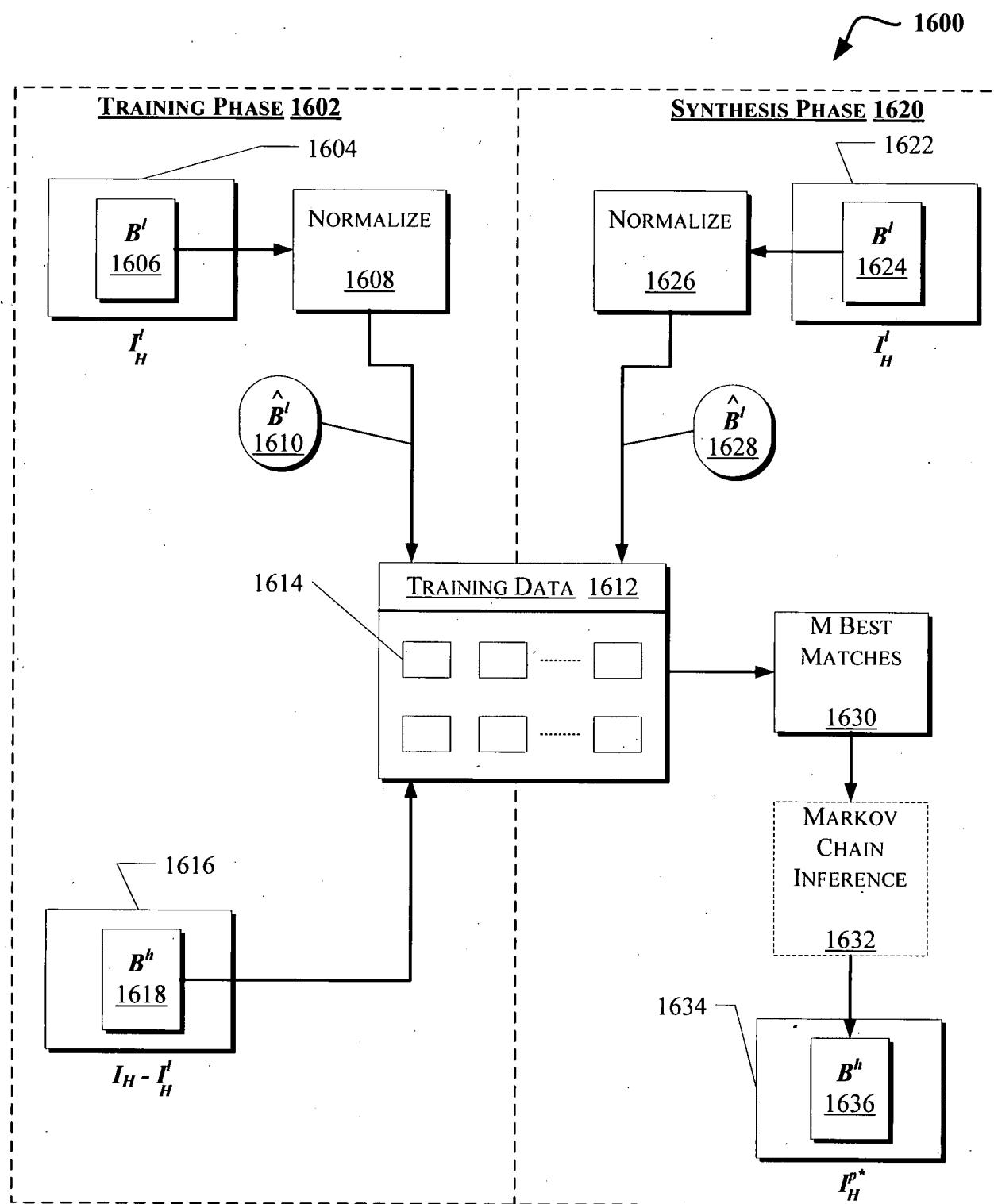


FIG. 16

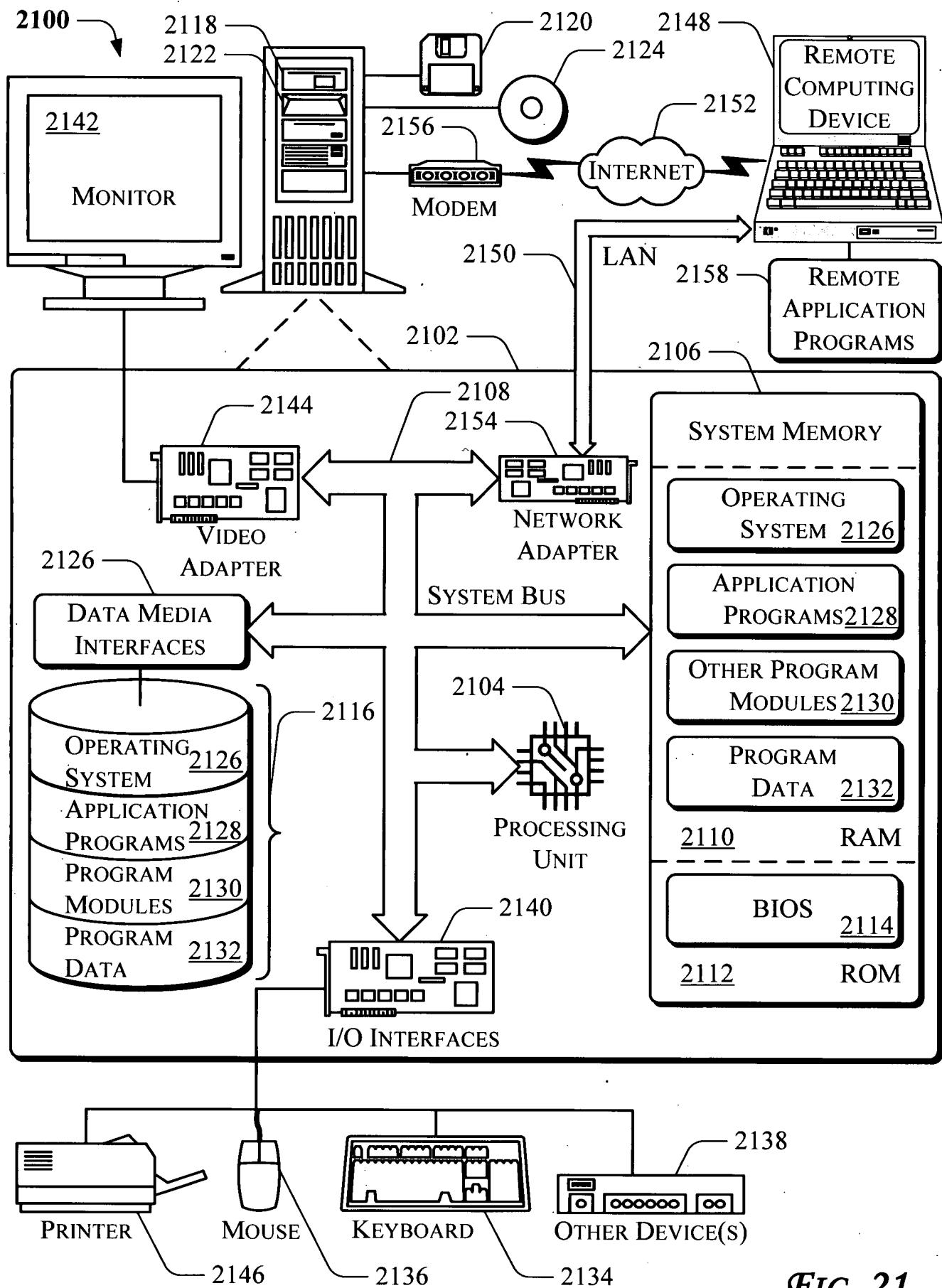


FIG. 21

SYSTEM MEMORY 2106**APPLICATION PROGRAMS 2128**NORMALIZATION MODULE 2202PRIMITIVE LAYER MAP MODULE 2204PRIMAL SKETCH PRIORS EXTRACTION MODULE 2206INTERPOLATION MODULE 2208IMAGE HALLUCINATION MODULE 2210BEST MATCH MODULE 2212MARKOV CHAIN INFERENCE MODULE 2214BELIEF PROPAGATION MODULE 2216**PROGRAM DATA 2132**ORIGINAL IMAGE 2218INTERPOLATED IMAGE 2220LOW-FREQUENCY IMAGE 2222TRAINING IMAGES 2224HIGH-FREQUENCY PRIMITIVE LAYER 2226INTERMEDIATE IMAGE 2228RECONSTRUCTED IMAGE 2230HIGH-RESOLUTION IMAGE 2232FILTER BANK DATA 2234PRIMAL SKETCH PRIORS 2236OTHER DATA 2238

2200

E.G., BEST MATCHED EXAMPLES,
BELIEF PROROGATION DATA,
MARKOV CHAIN INFERENCE
DATA, LOW-FREQUENCY
PRIMITIVES, NORMALIZED LOW-
FREQUENCY PRIMITIVES, HIGH-
FREQUENCY PRIMITIVES,
CONTRAST DATA, ETC.

FIG. 22